

Effectiveness of Nutritional Program on Senior Person Knowledge Regarding Constipation Management at Nursing Home Centers in Al-Kut City

MOSTAFA MOHAMMAD ALI AL-FATLAWI¹, SUAD J. MOHAMMAD²

¹Doctorate student / Adult Nursing department ,University of Baghdad/ college of Nursing

²University of Baghdad, College of nursing

Correspondence to: Mostafa Mohammad Ali Al-Fatlawi, Email:alfatlawimostafa@gmail.com

ABSTRACT

Introduction: Constipation is a clinical diagnosis based on symptoms of incomplete elimination of stool, difficulty passing stool, or both. Patients typically experience other symptoms such as hard stools, abdominal bloating, pain, and distention.

Methods: A quantitative, quasi-experimental study design was carried out at two nursing home centers (Dar Al-Shhafa government home and Basmat Al-Rahmma private nursing home) in order to determine the effectiveness of a nursing home program. Beginning on the 24th of December 2020 and ending on the 15th of January 2022, the current study will be conducted. In order to meet the study's aims, a non-probability (purposive) sample of (57) senior citizens (27) senior citizens selected for the case group and (30) senior citizens selected for the control group who were residents of a nursing home were selected.

Results: Analysis of such knowledge shows that the large number of senior persons, in study group, has expressed poor level of knowledge about constipation at the pretest. Such poor level of knowledge is evidenced in all the low mean of scores on items of senior persons' knowledge about constipation .

Conclusions and recommendation :It has been emphasized in the literature that patients must spend more time seeking health-related education in order to improve their health care outcomes. The teaching must be enthusiastic, motivated, and responsive to the individual patient's needs. For individual members of the society to realize the benefits of health education, there is a need for a robust, hearty engagement between patients and health care providers .

Keywords: Nutritional, Senior Person, knowledge , Constipation Management

INTRODUCTION

Constipation is a clinical diagnosis based on symptoms of incomplete elimination of stool, difficulty passing stool, or both. Patients typically experience other symptoms such as hard stools, abdominal bloating, pain, and distention, (Vriesman, et.al, 2020), it is one of the most frequent gastrointestinal disorders encountered in clinical practice in Western societies. Its prevalence increases with age and is more frequently reported in female patients. Chronic constipation has been associated with considerable impairment in quality of life, can result in large individual healthcare costs, and represents a burden to healthcare delivery systems, (Fosnes, et.al, 2019). Constipation is a common disorder in the elderly population globally and is associated with comorbidities and negative implications on the quality of life. Constipation prevalence varies in different studies, primarily owing to the nonuniformity of the diagnostic criteria. However, 15%-30% of individuals aged >60 years are diagnosed with constipation(Drossman,2019). Constipation is a common condition and is particularly prevalent among the elderly with up to 40% of community-dwelling residents reporting symptoms of the condition,(Werth, & Christopher, 2021), (Fosnes, et.al, 2019). Among people living in nursing homes, prevalence up to as high as 80% has been reported,(Werth, & Christopher, 2021), (Fosnes, et.al, 2019). Chronic constipation can lead to complications such as fecal impaction, urinary retention, hemorrhoids, anal fissures, and fecal incontinence and it negatively impacts health-related quality of life,(Heine RG,2020).

The study aim to determine the effectiveness of nutritional program on senior persons ' knowledge about constipation management at nursing home centers .

METHODOLOGY

In Al-Kut City, a quantitative, quasi-experimental study design was carried out at two nursing home centers (Dar Al-Shhafa government home and Basmat Al-Rahmma private nursing home) in order to determine the effectiveness of a nursing home program. Beginning on the 24th of December 2020 and ending on the 15th of January 2022, the current study will be conducted. In order to meet the study's aims, a non-probability (purposive) sample of (57) senior citizens (27) senior citizens selected for the case group and (30) senior citizens selected for the control group who were

residents of a nursing home were selected. The instrument is divided into three sections, which are as follows: socio-demographic factors, assessment of senior individuals' knowledge multiple choice questions, and assessment of senior persons' constipation signs (sever , mild , and never). It has been determined that the instrument's content validity has been established by a panel of experts It was established that the instrument scale was reliable by applying the Cronbagns' Coefficient alpha equation, which had a value of 0.70.The information was gathered using a structured interview formatted in a questionnaire format, and it was analyzed through the use of descriptive and inferential statistical methods

RESULTS

Analysis of such knowledge shows that the large number of senior persons, in study group, has expressed poor level of knowledge about constipation at the pretest (Table 1-1-A; Figure 1-1). Such poor level of knowledge is evidenced in all the low mean of scores on items of senior persons' knowledge about constipation (Table 4-4-2). These findings can be interpreted in a way that these senior persons are not aware about the problem of constipation and they have experienced lack in their capacity of knowledge about constipation prior to their being exposed to the education program. So, the study confirms that they need to have access to some means of education to increase their awareness relative to such a problem.Supportive evidence to such finding is reported in the work of Emmanuel and his colleagues (2017) who conclude that awareness of constipation, its complications and treatment options need to be increased among older patients.At the posttest I, the study presents those senior persons after their being exposed to the education program, their knowledge about constipation has been improved and most of them have acquired good level of knowledge (Table 4-5-1 Through Table 4-8; Figure 4-2 through 4-5). Such finding provides an indication that their knowledge about constipation is very evident in the high mean of scores on items of knowledge about such problem (Table 4-5-2; Table 4-6-2; Table 4-7-2).

Table (1-1): Senior Persons' Knowledge about Constipation in the Study Group

Table 1-1-A: Overall Assessment of the Senior Persons' Knowledge about Constipation at the Pre-test

Weight	Freq.	%	M ± SD
Poor Knowledge	25	92.6	47.25 ± 8.203
Good Knowledge	2	7.4	
Total	27	100.0	

"M: Mean of total Scores, SD: Standard Deviation for total scores (Poor=40-60; Good=61-80"

Findings illustrated at the pre-test period of measurement that the poor knowledge towards constipation have reported the highest percentage (n=25; 92.6%) as compared to those who have expressed a good level of knowledge (n=2; 7.4%) among senior persons (M ± SD=47.25 ± 8.203).

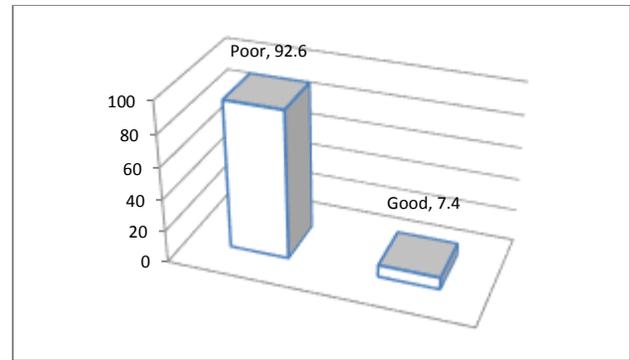


Figure (1-1): Pre-test for Study Group's Knowledge about Constipation

Table 1-1-2: Mean of Scores on Items of Senior Persons' Knowledge about Constipation at Pre-test for the Study Group

Knowledge Items		Pre-test	
		M ± SD	Ass.
1	With ageing the amount of calories or energy decrease because?	1.22±0.423	Low
2	Healthy food for Senior persons contributes to physical health and also greatly affects?	1.14±0.362	Low
3	With ageing, there are many physiological changes may happen like?	1.29±0.465	Low
4	Senior persons need fewer calories to maintain their weight because they move less, if they continue to eat the same amount of calories they are going to?	1.14±0.362	Low
5	Healthy nutrition is the best way for senior persons to prevent?	1.07±0.266	Low
6	The most common digestive problems in senior persons?	1.07±0.266	Low
7	Nutrition for the senior persons is important because?	1.18±0.395	Low
8	Essential nutrient can be defined as?	1.14±0.362	Low
9	Dietary fiber can be defined as?	1.03±0.192	Low
10	The main reason senior persons need protein is to maintain muscle strength and mass , so protein is vital with ageing . Its decrease can lead to?	1.07±0.266	Low
11	Dietary fiber important for senior persons because?	1.03±0.192	Low
12	From the sources of carbohydrates?	1.18±0.395	Low
13	Vitamin B12 deficiency affects people over the age of 60 due to?	1.14±0.362	Low
14	Signs of vitamin B12 deficiency in older people are?	1.22±0.423	Low
15	Osteoporosis can happen due to decrease of?	1.25±0.446	Low
16	What metal is responsible for maintaining strong muscles and normal blood pressure levels?	1.25±0.446	Low
17	Fatty acids are essential fats, healthy and necessary for health it is available in?	1.25±0.446	Low
18	Low levels of omega-3 can lead to?	1.11±0.320	Low
19	The digestive system is responsible for?	1.22±0.423	Low
20	Saliva function is destroying some types of?	1.14±0.362	Low
21	Stomach contain cannot return to the esophagus because?	1.37±0.492	Low
22	Stomach functions are?	1.07±0.266	Low
23	Small intestine can absorb nutrient because of ?	1.07±0.266	Low
24	Large intestine function is?	1.29±0.465	Low
25	It is accessory organ to complete digestion process except?	1.11±0.320	Low
26	Food move through the intestines in waves shape called?	1.22±0.423	Low
27	The gastro-colic reflex increases in?	1.14±0.362	Low
28	Constipation affects people in?	1.37±0.492	Low
29	Constipation is a common digestive problem can causes disorders in?	1.33±0.480	Low
30	Constipation can be define as?	1.25±0.446	Low
31	Constipation can happen due to?	1.07±0.266	Low
32	Chronic constipation, common in the elderly and always synchronized with?	1.29±0.465	Low
33	Constipation may be due to decrease secretion of?	1.18±0.395	Low
34	Chronic constipation can lead to?	1.22±0.423	Low
35	Constipation warning signs are?	1.18±0.395	Low
36	Constipation complications like?	1.14±0.362	Low
37	Dietary fiber can help in control?	1.14±0.362	Low
38	Some types of food rich in dietary fiber like?	1.14±0.362	Low
39	Increase use of abdominal softener can lead to?	1.14±0.362	Low
40	Constipation is?	1.18±0.395	Low

Table 1-1-1: Overall Assessment of the Senior Persons' Knowledge about Constipation at the Post-test I of the Study Group

Weight	Freq.	%	M ± SD
Poor Knowledge	8	29.6	67.77 ± 11.533
Good Knowledge	19	70.4	
Total	27	100.0	

"M: Mean of total Scores, SD: Standard Deviation for total scores (Poor=40-60; Good=61-80"

Table 1-2: Statistical Significant Difference between Posttest I and II by Their Overall Responses to the Knowledge Scores

Study Group Knowledge	Weight	Mean	S.D	t-value	d.f	p≤ 0.05	Sig
	Post-test One	1.69	0.288				
	Post-test Two	1.64	0.262				

M: Mean, SD: Standard deviation, t: t-test, d.f: Degree of freedom, Sig: Significance, p: Probability value, No-sig.: No significant

Table 1-1-2: Mean of scores on Items of Senior Persons' Knowledge about Constipation at Post-test I of the Study Group

Knowledge Items		Post-test One	
		M ± SD	Ass.
1	With ageing the amount of calories or energy decrease because?	1.74±0.446	High
2	Healthy food for Senior persons contributes to physical health and also greatly affects?	1.77±0.423	High
3	With ageing, there are many physiological changes may happen like?	1.59±0.500	High
4	Senior persons need fewer calories to maintain their weight because they move less, if they continue to eat the same amount of calories they are going to?	1.66±0.480	High
5	Healthy nutrition is the best way for senior persons to prevent?	1.88±0.320	High
6	The most common digestive problems in senior persons?	1.74±0.446	High
7	Nutrition for the senior persons is important because?	1.70±0.465	High
8	Essential nutrient can be defined as?	1.70±0.465	High
9	Dietary fiber can be defined as?	1.62±0.492	High
10	The main reason senior persons need protein is to maintain muscle strength and mass , so protein is vital with ageing . Its decrease can lead to?	1.74±0.446	High
11	Dietary fiber important for senior persons because?	1.77±0.423	High
12	From the sources of carbohydrates?	1.74±0.446	High
13	Vitamin B12 deficiency affects people over the age of 60 due to?	1.70±0.465	High
14	Signs of vitamin B12 deficiency in older people are?	1.74±0.446	High
15	Osteoporosis can happen due to decrease of?	1.66±0.480	High
16	What metal is responsible for maintaining strong muscles and normal blood pressure levels?	1.49±0.500	High
17	Fatty acids are essential fats, healthy and necessary for health it is available in?	1.66±0.480	High
18	Low levels of omega-3 can lead to?	1.81±0.395	High
19	The digestive system is responsible for?	1.62±0.492	High
20	Saliva function is destroying some types of?	1.74±0.446	High
21	Stomach contain cannot return to the esophagus because?	1.74±0.446	High
22	Stomach functions are?	1.59±0.500	High
23	Small intestine can absorb nutrient because of?	1.70±0.465	High
24	Large intestine function is?	1.77±0.423	High
25	It is accessory organ to complete digestion process except?	1.70±0.465	High
26	Food move through the intestines in waves shape called?	1.70±0.465	High
27	The gastro-colic reflex increases in?	1.55±0.506	High
28	Constipation affects people in?	1.70±0.465	High
29	Constipation is a common digestive problem can causes disorders in ?	1.74±0.446	High
30	Constipation can be defined as?	1.42±0.492	Low
31	Constipation can happen due to?	1.74±0.446	High
32	Chronic constipation, common in the elderly and always synchronized with?	1.62±0.492	High
33	Constipation may be due to decrease secretion of?	1.62±0.492	High
34	Chronic constipation can lead to ?	1.70±0.465	High
35	Constipation warning signs are?	1.70±0.465	High
36	Constipation complications like?	1.74±0.446	High
37	Dietary fiber can help in control?	1.70±0.465	High
38	Some types of food rich in dietary fiber like?	1.66±0.480	High
39	Increase use of abdominal softener can lead to?	1.62±0.492	High
40	Constipation is?	1.51±0.509	Low

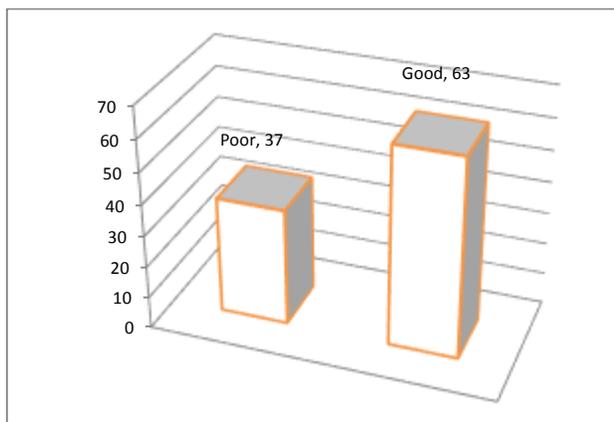


Figure 1-1: Senior Persons' Knowledge about Constipation at the Posttest II in the Study Group

CONCLUSIONS AND RECOMMENDATION

It has been emphasized in the literature that patients must spend more time seeking health-related education in order to improve their health care outcomes. The teaching must be enthusiastic, motivated, and responsive to the individual patient's needs. For individual members of the society to realize the benefits of health education, there is a need for a robust, hearty engagement between patients and health care providers (Paterick et. al., 2017).

REFERENCES

- Vriesman, M. H., Koppen, I. J., Camilleri, M., Di Lorenzo, C., & Benninga, M. A. (2020). Management of functional constipation in children and adults. *Nature Reviews Gastroenterology & Hepatology*, 17(1), 21-39.
- Drossman, D. A., & Tack, J. (2021). Rome Foundation Clinical Diagnostic Criteria for Disorders of Gut-Brain Interaction (DGBI). *Gastroenterology*.
- Werth, B. L., & Christopher, S. A. (2021). Potential risk factors for constipation in the community. *World Journal of Gastroenterology*, 27(21), 2795.
- Working Group of the Australian and New Zealand Bone and Mineral Society, Endocrine Society of Australia and Osteoporosis Australia. 2019. Vitamin D and adult bone health in Australia and New Zealand: a position statement. *Medical Journal of Australia* 182: 281-5.
- Nasir Muwfaq Younis ,Mahmoud Mohammed Ahmed, and Ahmed Ali Hussein.Nurses' knowledge, attitude and practice towards preparedness of disaster management in emergency of mosul teaching hospitals. *Medico-Legal Update*, 2020, 20(3), pp. 775-779.
- Younis NM, Mahmoud M, Ahmed A, et al. University Students' Attitude Towards E-Learning. *Bahrain Medical Bulletin* 2021;43(2):460-2.
- Muwfaq YN, Ahmed MM, Abdulsalam RR. Assessing Quality of Life in Palliative Care. *Bahrain Medical Bulletin* 2021;43(3):594-6.
- Mahmoud Mohammed Ahmed, Nasir Muwfaq Younis,Nawaf Mohammed Dahir,Kareem Nasir Hussien. Acceptance of Covid-19 vaccine among nursing students of Mosul University, Iraq. *Rawal Medical Journal*. Volume 47 No. 2 of 2022.
- Mahmoud Mohammed Ahmed, Nasir Muwfaq Younis and Ahmed Ali Hussein. Prevalence of Tobacco use among Health Care Workers at Primary Health care Centers in Mosul City. *Pakistan Journal of Medical and Health Sciences*, 2021, 15(1), pp. 421-424